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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/815,277 | 04/01/2004 | Mitchell T. Johnson | 59656US002 | 8373 |

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| EXAMINER | |
|---|---|
| THOMAS, JAISON P | |

| ART UNIT | PAPER NUMBER |
|---|---|
| 1751 | |

DATE MAILED: 08/04/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

| Office Action Summary | Application No. | Applicant(s) | |
|---|---|---|---|
| | 10/815,277 | JOHNSON ET AL. | |
| | Examiner | Art Unit | |
| | Jaison P. Thomas | 1751 | |

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)☒ Responsive to communication(s) filed on *21 July 2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4)☒ Claim(s) *1-26* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☐ Claim(s) *1-26* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

**Application Papers**

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *9/2004, 10/2004*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

## DETAILED ACTION

### *Claim Rejections - 35 USC § 112*

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 9, 13 and 15 recite the limitation "hydrocarbon surfactant" in line 1. There is insufficient antecedent basis for this limitation in the claim. For purposes of examination Claims 9, 13 and 15 will be read to require a "surfactant" only.

### *Claim Rejections - 35 USC § 102*

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-3, 5, 6, 8-10, 13, 14 are rejected under 35 U.S.C. 102(b) as being anticipated by Cekada et al. (US Patent No. 3445415 and US Patent No. 3433780 incorporated by reference).

Cekada et al. teaches a method of making organic latexes which are useful for the treatment of fibrous substrates ('415 patent, Column 1, lines 46-56). The patent teaches a silsesquioxane colloidal suspension which contains silanes having a formula $RSi(OR'')_3$ where R is a monovalent radical selected from a group of hydrocarbon radicals containing 1 to 5 carbon atoms and R'' is selected from a group consisting of alkyl radicals containing 1 to 4 carbon atoms ('415 patent, Column 1-2, lines 62-68, lines

1-2) which is then added to a water-surfactant mixture. The specification further incorporates US Patent Application 427,077 (now US Patent No. 3433780) for further discussion of the making of the silsesquioxane colloidal mixture (Column 2, lines 18-24). Patent '780 discloses a variety of surfactants that can be used to make the colloidal mixture including anionic, cationic, and amphoteric and nonionic compounds which can be used in conjunction with the other surfactants ('780 patent, Column 3, lines 30-52) including dodecyl benezenesulfonic acids ('780 patent, Column 3, lines 35-38). Added to the colloidal suspension is a free radical catalyst and an organic monomer ('415 patent, Column 2, lines 45-48). The free radical catalyst is selected from a group detailed in '415 patent, Column 2, lines 51-63 and includes a variety of peroxy compounds including hydrogen peroxide ('415 patent, Column 2, line 53). The organic monomer is polymerized in solution ('415 patent, Column 2, lines 39-44) and are selected from a variety of chemicals including alpha and beta substituted acrylates ('415 patent, Column 5, lines 44-47).

With regards to the pH limitations of Claim 2, the examiner respectfully submits that the prior art inherently meets the claimed limitation. Specifically, the reference teaches identical components and is produced in the same or similar mmanner and would inherently possess the pH values of 4 to 7.

With respect to the salt forms of the surfactants required in Claims 10,14, and 20 it is commonplace in chemistry that acids will react with the common alkali metal hydroxides to form salts, therefore the common salts are said to be unpatentable

variants and to be suggested to the chemist by the old acid, see *In re Williams*, 89 USPQ 396.

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Cekada et al. (US Patent No. 3445415 and US Patent No. 3433780 incorporated by reference).

Cekada et al. is relied upon as discussed above. However, Cekada does not teach a silsesquioxane formed from the cocondensates of $R\text{-}Si(OR')_3$ and either $Si(OR')_4$ or $R2\text{-}Si(OR')_2$.

It would have been obvious to one of ordinary skill in the art at the time the invention was made that compounds which are position isomers (compounds having the same radicals in physically different positions on the same nucleus) or homologs (compounds differing regularly by the successive addition of the same chemical group, e.g., by -CH2- groups) are generally of sufficiently close structural similarity that there is a presumed expectation that such compounds possess similar properties. *In re Wilder*, 563 F.2d 457, 195 USPQ 426 (CCPA 1977). See also *In re May*, 574 F.2d 1082, 197 USPQ 601 (CCPA 1978).

7. Claims 4, 21 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cekada et al. (US Patent No. 3445415 and US Patent No. 3433780 incorporated by reference).

Cekada et al. is relied upon as discussed above.

Cekada et al. does not teach the weight percentage limitations of the silsesquioxane, peroxy and surfactant compounds as required by Claims 21 and 22 nor the requirement of a "cosmetic grade" hydrogen peroxide as required by Claim 4.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to optimize the silsesquioxane, peroxy and surfactant compound ratios and the purity of the hydrogen peroxide through routine experimentation for best results. As to optimization results, a patent will not be granted based upon the optimization of result effective variables when the optimization is obtained through routine experimentation unless there is a showing of unexpected results which properly rebuts the prima facie case of obviousness. See *In re Boesch*, 617 F.2d 272, 276, 205 USPQ 215, 219 (CCPA 1980). See *also In re Woodruff*, 919 F.2d 1575, 1578, 16 USPQ2d 1934, 1936-37 (Fed. Cir. 1990), and *In re Aller*, 220 F.2d 454, 456, 105 USPQ 233, 235 (CCPA 1955).

8. Claims 1-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chang et al. (US Patent No. 6736857) in view of Rees (US Patent No. 5284597).

The applied reference has a common assignee with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art

only under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 103(a) might be overcome by: (1) a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not an invention "by another"; (2) a showing of a date of invention for the claimed subject matter of the application which corresponds to subject matter disclosed but not claimed in the reference, prior to the effective U.S. filing date of the reference under 37 CFR 1.131; or (3) an oath or declaration under 37 CFR 1.130 stating that the application and reference are currently owned by the same party and that the inventor named in the application is the prior inventor under 35 U.S.C. 104, together with a terminal disclaimer in accordance with 37 CFR 1.321(c). This rejection might also be overcome by showing that the reference is disqualified under 35 U.S.C. 103(c) as prior art in a rejection under 35 U.S.C. 103(a). See MPEP § 706.02(l)(1) and § 706.02(l)(2).

Chang et al. teaches a carpet cleaning composition which contains a silsesquioxane, surfactant, a stainblocking polymer and optionally a sequestering agent (Abstract). Chang further teaches that the composition can optionally contain other ingredients as well (Column 17, lines 46-48). The silsesquioxane polymers used in Chang can be made of silanes with the formula of $R\text{-}Si(OR')_3$ alone or with $Si(OR')_4$ and/or $R2\text{-}Si(OR')_2$ where "R represents a substituted or unsubstituted hydrocarbon radical having 1 to 7 carbon atoms, ..., R' represents an alkyl radical with 1 to 4 carbon atoms" (Column 14, lines 3-9). The total weight of silanes used ranges from 3 to 20 percent (Column 14, lines 23-25). The surfactants used include anionic (e.g. sodium xylene sulfonate or sodium dodecylbenzenesulfonate) (Column 15, lines 51-67) and

nonionic with HLB values of at least 18 (e.g. nonylphenol polyethylene glycol) (Column 16, lines 9-22) wherein the surfactant is present anywhere from 0.1 to 10% by weight (Column 15, lines 44-46). Surfactants can be used alone or in combination with each other (Column 15, lines 11-13). Stainblocking polymers are preferably selected from classes of sulfonated aromatic polymers, polymers derived from alpha and beta substituted acrylic acid monomers and hydrolyzed copolymers of at least one or more ethylenically unsaturated monomers and maleic anhydride (Column 3, lines 42-45) and suggested amounts are disclosed (Column 12, lines 43-59). Optionally the composition contains a sequestering agent to chelate ions such as EDTA and sodium tripolyphosphate (Column 16, lines 31-60).

Chang et al. is relied upon as discussed above. However, Chang does not teach the addition of peroxy compound to the compositions as required by instant Claim 1.

Rees teaches that peroxygen reagents such as hydrogen peroxide which are known color safe oxidizing agents that can be used on carpet or textile substrates in moderately low concentrations (Column 1, lines 9-14) such 0.1 to 5.0% which has shown very good cleaning results on red wine, grape, juice, blueberry and blood stains (Column 2, lines 8-10 and Column 2, lines 28-30).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to include a peroxy compound as Chang et al. teaches the option of adding additional ingredients discussed above and Rees teaches that peroxygen reagents such as hydrogen peroxide are known color safe oxidizing agents that can be used on carpet or textile substrates in moderately low concentrations (Column 1, lines

9-14) such 0.1 to 5.0% which has shown very good cleaning results on red wine, grape, juice, blueberry and blood stains (Column 2, lines 8-10 and Column 2, lines 28-30).

With respect to the "cosmetic grade" hydrogen peroxide limitation of Claim 4, it would have been obvious to one of ordinary skill in the art at the time the invention was made to optimize the purity of the hydrogen peroxide through routine experimentation for best results. As to optimization results, a patent will not be granted based upon the optimization of result effective variables when the optimization is obtained through routine experimentation unless there is a showing of unexpected results which properly rebuts the prima facie case of obviousness. See *In re Boesch*, 617 F.2d 272, 276, 205 USPQ 215, 219 (CCPA 1980). See *also In re Woodruff*, 919 F.2d 1575, 1578, 16 USPQ2d 1934, 1936-37 (Fed. Cir. 1990), and *In re Aller*, 220 F.2d 454, 456, 105 USPQ 233, 235 (CCPA 1955).

9. Claims 1-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chang et al. (US Patent No. 6802870) in view of Rees (US Patent No. 5284597).

The applied reference has a common assignee with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art only under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 103(a) might be overcome by: (1) a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not an invention "by another"; (2) a showing of a date of invention for the claimed subject matter of the application which corresponds to subject matter disclosed but not claimed

in the reference, prior to the effective U.S. filing date of the reference under 37 CFR 1.131; or (3) an oath or declaration under 37 CFR 1.130 stating that the application and reference are currently owned by the same party and that the inventor named in the application is the prior inventor under 35 U.S.C. 104, together with a terminal disclaimer in accordance with 37 CFR 1.321(c). This rejection might also be overcome by showing that the reference is disqualified under 35 U.S.C. 103(c) as prior art in a rejection under 35 U.S.C. 103(a). See MPEP § 706.02(l)(1) and § 706.02(l)(2).

Chang et al. teaches a carpet cleaning composition which contains a silsesquioxane, surfactant, a stainblocking polymer and optionally a sequestering agent (Abstract). Chang further teaches that the composition can optionally contain other ingredients as well (Column 17, lines 38-44). The silsesquioxane polymers used in Chang can be made of silanes with the formula of $R\text{-}Si(OR')_3$ alone or with $Si(OR')_4$ and/or $R2\text{-}Si(OR')_2$ where "R represents a substituted or unsubstituted hydrocarbon radical having 1 to 7 carbon atoms (Column 13, lines 64-67), ..., R' represents an alkyl radical with 1 to 4 carbon atoms" (Column 14, lines 3-9). The total weight of silanes used ranges from 3 to 20 percent (Column 14, lines 16-18). The surfactants used include anionic (e.g. sodium xylene sulfonate or sodium dodecylbenzenesulfonate) (Column 15, lines 44-59) and nonionic with HLB values of at least 18 (e.g. nonylphenol polyethylene glycol) (Column 16, lines 1-3) wherein the surfactant is present anywhere from 0.1 to 10% by weight (Column 15, lines 36-39). Surfactants can be used alone or in combination with each other (Column 15, lines 4-6). Stainblocking polymers are preferably selected from classes of sulfonated aromatic polymers, polymers derived

from alpha and beta substituted acrylic acid monomers and hydrolyzed copolymers of at least one or more ethylenically unsaturated monomers and maleic anhydride (Column 3, lines 44-57) and suggested amounts are disclosed (Column 12, lines 36-53). Optionally the composition contains a sequestering agent to chelate ions such as EDTA and sodium tripolyphosphate (Column 16, lines 23-52).

Chang et al. is relied upon as discussed above. However, Chang does not teach the addition of peroxy compound to the compositions as required by instant Claim 1.

Rees teaches that peroxygen reagents such as hydrogen peroxide which are known color safe oxidizing agents that can be used on carpet or textile substrates in moderately low concentrations (Column 1, lines 9-14) such 0.1 to 5.0% which has shown very good cleaning results on red wine, grape, juice, blueberry and blood stains (Column 2, lines 8-10 and Column 2, lines 28-30).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to include a peroxy compound as Chang et al. teaches the option of adding additional ingredients discussed above and Rees teaches that peroxygen reagents such as hydrogen peroxide are known color safe oxidizing agents that can be used on carpet or textile substrates in moderately low concentrations (Column 1, lines 9-14) such 0.1 to 5.0% which has shown very good cleaning results on red wine, grape, juice, blueberry and blood stains (Column 2, lines 8-10 and Column 2, lines 28-30).

With respect to the "cosmetic grade" hydrogen peroxide limitation of Claim 4, it would have been obvious to one of ordinary skill in the art at the time the invention was made to optimize the purity of the hydrogen peroxide through routine experimentation

for best results. As to optimization results, a patent will not be granted based upon the optimization of result effective variables when the optimization is obtained through routine experimentation unless there is a showing of unexpected results which properly rebuts the prima facie case of obviousness. See *In re Boesch*, 617 F.2d 272, 276, 205 USPQ 215, 219 (CCPA 1980). See *also In re Woodruff*, 919 F.2d 1575, 1578, 16 USPQ2d 1934, 1936-37 (Fed. Cir. 1990), and *In re Aller*, 220 F.2d 454, 456, 105 USPQ 233, 235 (CCPA 1955).

***Double Patenting***

10. Claims 1-26 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1,2,4,5,7-15,19,20,21 of Chang et al. (U.S. Patent No. 6736857) in view of Rees (US Patent No. 5284597).

Chang et al. is relied upon as discussed above. However, Chang does not teach the addition of peroxy compound to the compositions as required by instant Claim 1.

Rees teaches that peroxygen reagents such as hydrogen peroxide which are known color safe oxidizing agents that can be used on carpet or textile substrates in moderately low concentrations (Column 1, lines 9-14) such 0.1 to 5.0% which has shown very good cleaning results on red wine, grape, juice, blueberry and blood stains (Column 2, lines 8-10 and Column 2, lines 28-30).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to include a peroxy compound as Chang et al. teaches the option of adding additional ingredients discussed above and Rees teaches that peroxygen

reagents such as hydrogen peroxide are known color safe oxidizing agents that can be used on carpet or textile substrates in moderately low concentrations (Column 1, lines 9-14) such 0.1 to 5.0% which has shown very good cleaning results on red wine, grape, juice, blueberry and blood stains (Column 2, lines 8-10 and Column 2, lines 28-30).

With respect to the "cosmetic grade" hydrogen peroxide limitation of Claim 4, it would have been obvious to one of ordinary skill in the art at the time the invention was made to optimize the purity of the hydrogen peroxide through routine experimentation for best results. As to optimization results, a patent will not be granted based upon the optimization of result effective variables when the optimization is obtained through routine experimentation unless there is a showing of unexpected results which properly rebuts the prima facie case of obviousness. See *In re Boesch*, 617 F.2d 272, 276, 205 USPQ 215, 219 (CCPA 1980). See *also In re Woodruff*, 919 F.2d 1575, 1578, 16 USPQ2d 1934, 1936-37 (Fed. Cir. 1990), and *In re Aller*, 220 F.2d 454, 456, 105 USPQ 233, 235 (CCPA 1955).

11. Claims 1,2,4,5-10,14,16-22 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1,2,3,5,6,7,8,9,10. of Chang et al. (U.S. Patent No. 6802870) in view of Rees (US Patent No. 5284597).

Chang et al. is relied upon as discussed above. However, Chang does not teach the addition of peroxy compound to the compositions as required by instant Claim 1.

Rees teaches that peroxygen reagents such as hydrogen peroxide which are known color safe oxidizing agents that can be used on carpet or textile substrates in moderately low concentrations (Column 1, lines 9-14) such 0.1 to 5.0% which has shown very good cleaning results on red wine, grape, juice, blueberry and blood stains (Column 2, lines 8-10 and Column 2, lines 28-30).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to include a peroxy compound as Chang et al. teaches the option of adding additional ingredients discussed above and Rees teaches that peroxygen reagents such as hydrogen peroxide are known color safe oxidizing agents that can be used on carpet or textile substrates in moderately low concentrations (Column 1, lines 9-14) such 0.1 to 5.0% which has shown very good cleaning results on red wine, grape, juice, blueberry and blood stains (Column 2, lines 8-10 and Column 2, lines 28-30).

With respect to the "cosmetic grade" hydrogen peroxide limitation of Claim 4, it would have been obvious to one of ordinary skill in the art at the time the invention was made to optimize the purity of the hydrogen peroxide through routine experimentation for best results. As to optimization results, a patent will not be granted based upon the optimization of result effective variables when the optimization is obtained through routine experimentation unless there is a showing of unexpected results which properly rebuts the prima facie case of obviousness. See *In re Boesch*, 617 F.2d 272, 276, 205 USPQ 215, 219 (CCPA 1980). See *also In re Woodruff*, 919 F.2d 1575, 1578, 16 USPQ2d 1934, 1936-37 (Fed. Cir. 1990), and *In re Aller*, 220 F.2d 454, 456, 105 USPQ 233, 235 (CCPA 1955).

***Conclusion***

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jaison P. Thomas whose telephone number is (571) 272-8917. The examiner can normally be reached on Mon-Fri 8:30 am to 5:00 pm.

13. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Douglas McGinty can be reached on (571) 272-1029. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JT
Jaison Thomas
Examiner
7/31/2006

Lorna M. Douyon
LORNA M. DOUYON
PRIMARY EXAMINER